

CURRICULUM VITAE



PERSONAL PARTICULARS

Name : Azian Azamimi binti Abdullah
Current Address : No 6 Jalan Hajjah Puteh Hadapan Agro Bank
Simpang Empat, 02700 Simpang Empat
Perlis.
Phone Number : 017-2882770
E-mail : azamimi@unimap.edu.my ; azamimi@ieee.org
Date of Birth : 2 August 1982
Gender : Female
Nationality : Malaysian
IC Number : 820802-09-5034
Marital Status : Single

EDUCATIONAL BACKGROUND

March, 2009 M. Eng (Systems Innovation), University of Tokushima, Japan
March, 2006 B. Eng (Electrical & Electronic), University of Tokushima, Japan

THESIS

M. Eng (2009) : Effect of Chaos on the Learning Ability of Back Propagation Algorithm in Feed Forward Neural Network
B. Eng (2006) : Detection System for Chaos Communication using Cellular Neural Network

EMPLOYMENT HISTORY

April, 2009 – present Lecturer at School of Mechatronic Engineering, Universiti Malaysia Perlis (UniMAP)

April, 2007 – March, 2009 Fellow of UniMAP (SLAB)

April, 2006 – March, 2007 Product engineer at Toshiba Electronics Malaysia Sdn. Bhd, Selangor

PROFESSIONAL MEMBERSHIPS

2010 Member, Board of Engineers, Malaysia (BEM)

2010 Graduate Member, Institution of Engineers, Malaysia (IEM)

2007 Member, Institution of Electrical and Electronic Engineers (IEEE), USA

2007 Member, IEEE Circuits and Systems Society, USA

FORMAL TEACHING CONTACTS

July, 2009 – present ENT364/4 Control Systems, ENT423/4 Artificial Intelligent Systems, ENT115/3 Analogue Electronics I, ENT265/4 Microcontroller & Interfaces, EKT120/4 Computer Programming, ENT313/4 Biomedical Control Systems, ENT 116/3 Digital Electronic Principles

AWARDS AND CURRICULAR EXPERIENCES

October, 2008 Attached as researcher at Artificial Intelligence and Robotics Institute, Xian Jiaotong University, China

September, 2005 Awarded for IEEE Best Presentation Award at Shikoku-section Joint Convention of the Institutes of Electrical and Related Engineers 2005 (SJCIEE), Kagawa, Japan

August, 2004 Experienced internship at NEC Corporation, Tokyo, Japan

RESEARCH INTERESTS

1. Artificial intelligence
2. Biomedical signal and image processing
3. Control and instrumentation system
4. Modeling of nonlinear and complex systems

RESEARCH GRANTS

Short term grant (STG):

Fundamental Studies and Design of an Intelligent Diagnostic System for Leukemia Based on Bone Marrow Samples (Project Leader)

Duration: July 2010 – Jan 2012 (RM 14,000)

INTERNATIONAL CONTRIBUTIONS

TECHNICAL PROGRAMME COMMITTEE

UKSim 13th International Conference on Mathematical/Analytical Modelling and Computer Simulation, (UKSim 2011) 30 March – 1 April 2011, Cambridge University (Emmanuel College), UK

CONFERENCE PROCEEDINGS REVIEWER

- 1) **Reviewer**, Asia Modelling Symposium (AMS 2011), Manila, Philippines
- 2) **Reviewer**, UKSim 13th International Conference on Mathematical/Analytical Modelling and Computer Simulation (UKSim 2011), Cambridge University (Emmanuel College), UK
- 3) **Reviewer**, International Conference on Business, Engineering and Industrial Application (ICBEIA 2011), Kuala Lumpur, Malaysia
- 4) **Reviewer**, 7th International Colloquium on Signal Processing and Its Applications (CSPA 2011), Penang, Malaysia
- 5) **Reviewer**, 4th International Conference on Mechatronics (ICOM 2011), Kuala Lumpur, Malaysia
- 6) **Reviewer**, International Conference on Advanced Science, Engineering and Information Technology 2011 (ICASEIT 2011), Bangi, Selangor, Malaysia
- 7) **Reviewer**, 2011 IEEE Symposium on Computers and Informatics (ISCI 2011), Kuala Lumpur, Malaysia
- 8) **Reviewer**, 2010 International Conference on Open Systems (ICOS 2010), Kuala Lumpur, Malaysia
- 9) **Reviewer**, 2010 IEEE EMBS on Biomedical Engineering and Sciences (IECBES 2010), Kuala Lumpur, Malaysia
- 10) **Reviewer**, 2010 International Conference on Computer Applications and Industrial Electronics (ICCAIE 2010), Kuala Lumpur, Malaysia
- 11) **Reviewer**, 2010 IEEE Control and System Graduate Research Colloquium (ICSGRC 2010), Shah Alam, Malaysia

- 12) **Reviewer**, IEEE Symposium on Industrial Electronics and Applications (ISIEA 2010), Penang, Malaysia
- 13) **Reviewer**, 6th International Colloquium on Signal Processing and Its Applications (CSPA 2010), Melaka, Malaysia

PUBLICATION – INTERNATIONAL JOURNAL

- 1) **Azian Azamimi Abdullah** and Syamimi Mardhiah Shaharum, “Lung Cancer Cell Classification Method Using Artificial Neural Network”, *Information Engineering Letters*, ISSN: 2160-4114, Volume 2, Number 1, March, 2012, pp. 49-58
- 2) **Azian Azamimi Abdullah** and Zainab Omar, “The Effect of Temporal EEG Signal While Listening to Quran Recitation”, *International Journal of Advanced Science, Engineering and Information Technology (IJASEIT)*, ISSN: 2088-5334, Vol. 1 (2011) No. 4, pp. 372-375

PUBLICATION – CONFERENCE PROCEEDINGS

2012

- 1) **Azian Azamimi Abdullah** and Bu Chi Tze, “Implementation of Cellular Neural Network Algorithm for Brain Tumor”, *Proceedings of 2012 International Conference on Biomedical Engineering (ICOBE 2012)*, 27-28th Feb 2012, Penang, Malaysia. (Accepted)
- 2) **Azian Azamimi Abdullah**, Saufiah Abdul Rahim and Adira Ibrahim, “Development of EEG-based Epileptic Detection using Artificial Neural Network”, *Proceedings of 2012 International Conference on Biomedical Engineering (ICOBE 2012)*, 27-28th Feb 2012, Penang, Malaysia. (Accepted)

2011

- 3) **Azian Azamimi Abdullah** and Syamimi Mardhiah Shaharum, “Lung Cancer Cell Classification Method Using Artificial Neural Network”, *Proceedings of 2011 International Journal Conference on Engineering and Technology (CET 2011)*, 16-17th July 2011, Kota Kinabalu, Sabah, Malaysia.
- 4) **Azian Azamimi Abdullah** and Norafifah Md Podszi, “Premilinary Study of Pneumonia Symptoms Detection Method using Cellular Neural Network”, *Proceedings of International Conference on Electrical, Control and Computer Engineering (InECCE 2011)*, 21-22nd June 2011, Kuantan, Pahang, Malaysia. (Indexed in Scopus & IEEE Explore)
- 5) M.N. Norhayati, M.Y. Mashor, S.M. Sharun, **A.A. Azamimi** and W.N. Nurhadani, “Internal Model Control for InnoSAT Attitude Control”, *Proceedings of International Conference on*

Electrical, Control and Computer Engineering (InECCE 2011), 21-22nd June 2011, Kuantan, Pahang, Malaysia. (Indexed in Scopus & IEEE Explore)

- 6) **Azian Azamimi Abdullah**, Zulkarnay Zakaria and Nur Farahiyah Mohammad, “Design and Development of Fuzzy Expert System for Diagnosis of Hypertension”, Proceedings of 2nd *International Conference on Intelligent Systems, Modelling and Simulation* (ISMS 2011), 24-28th Jan 2011, Phnom Penh, Cambodia, pp. 113-118. (Indexed in Scopus & IEEE Explore)
- 7) Zulkarnay Zakaria, Muhamad Hafiz Bin Hussin, Ruzairi Abdul Rahim, Nur Farahiyah Mohammad, **Azian Azamimi Abdullah**, Sazali Yaacob and Syed Mustafa Kamal Syed Aman, “Performance Comparisons of New Excitation Coil Design Aspects in Magnetic Induction Tomography (MIT) Applications”, Proceedings of 2nd *International Conference on Intelligent Systems, Modelling and Simulation* (ISMS 2011), 24-28th Jan 2011, Phnom Penh, Cambodia, pp. 400-403. (Indexed in Scopus & IEEE Explore)
- 8) **Azian Azamimi Abdullah** and Zainab Omar, “The Effect of Temporal EEG Signal While Listening to Quran Recitation”, Proceedings of *International Conference on Advanced Science, Engineering and Information Technology 2011* (ICASEIT 2011), 14th – 15th Jan 2011, Bangi, Selangor, Malaysia (Indexed in ISI Thomsons)

2010

- 9) H. N. A. Salwa, K. Sundaraj, **A. A. Azamimi** and M. D. M. Zulkali, “The Application of Ultrasonic Transducer in Bacteria Growth Monitoring System”, Proceedings of 2010 *Asia Pacific Conference on Circuits and Systems* (APCCAS 2010), 6th – 9th Dec 2010, Kuala Lumpur, Malaysia (Indexed in IEEE Explore)
- 10) **Azian Azamimi Abdullah** and Hasdiana Mohamaddiah, “Development of Cellular Neural Network Algorithm for Detecting Lung Cancer Symptoms”, Proceedings of 2010 *IEEE Conference on Biomedical Engineering and Sciences* (IECBES 2010), 30th Nov – 2nd Dec 2010, Kuala Lumpur, Malaysia ((Indexed in IEEE Explore)
- 11) Aimi Salihah, A. N., M.Y.Mashor, Nor Hazlyna Harun, **Azian Azamimi Abdullah** and H. Rosline, “Improving Colour Image Segmentation on Acute Myelogeneous Leukaemia Images Using Contrast Enhancement Techniques”, Proceedings of 2010 *IEEE Conference on Biomedical Engineering and Sciences* (IECBES 2010), 30th Nov – 2nd Dec 2010, Kuala Lumpur, Malaysia ((Indexed in IEEE Explore)
- 12) **A. A. Azamimi**, Z. Rosniza and M.N. Farahiyah, “A Preliminary Study of Fuzzy Expert System Design for Diagnosis of Hypertension”, Proceedings of 4th *International Conference Postgraduate Education* (ICPE-4 2010), 26-28th Nov 2010, Kuala Lumpur, Malaysia. pp. 158-161.

- 13) M.N.Norhayati, A.S. Hashim, M.Y. Mashor, S.M. Sharun and **Azian Azamimi**, “Adaptive Neuro-Controller Design Based on MLP Network”, Proceedings of *International Postgraduate Conference on Engineering 2010* (IPCE 2010), 16-17th Oct 2010, Perlis, Malaysia.
- 14) H. N. A. Salwa, K. Sundaraj, **A. A. Azamimi** and M. D. M. Zulkali, “Bacteria Growth Monitoring System Using Ultrasonic Transducer”, Proceedings of *International Postgraduate Conference on Engineering 2010* (IPCE 2010), 16-17th Oct 2010, Perlis, Malaysia.
- 15) E. U. Francis, M. Y. Mashor, H. Roseline and **A. A. Azamimi**, “Image Enhancement Technique using Partial Contrast Stretching on Abnormal Bone Marrow Images for Leukemia Screening”, Proceedings of *International Postgraduate Conference on Engineering 2010* (IPCE 2010), 16-17th Oct 2010, Perlis, Malaysia.
- 16) Aimi Salihah, A.N., M.Y.Mashor and **Azian Azamimi Abdullah**, “Improving Blast Segmentation of Acute Myelogenous Leukaemia (AML) Images Using Bright Stretching Technique”, Proceedings of *International Postgraduate Conference on Engineering 2010* (IPCE 2010), 16-17th Oct 2010, Perlis, Malaysia.
- 17) Nur Farahiyah Mohammad, Muhammad Adam Zahid, Saidatul Ardeenawatie Awang, **Azian Azamimi Abdullah** and Zulkarnay Zakaria, “Synthesis And Characterization Of Bioceramic From Malaysian Cockle Shell”, Proceedings of *2010 IEEE Symposium on Industrial Electronics and Applications (ISIEA2010)*, 3rd – 6th Oct 2010, Penang, Malaysia.
- 18) **Azian Azamimi Abdullah**, Hafiz Salami Hussein, A.Saidatul, N.F Mohammad, Zulkarnay Z., “The Effect of Temporal EEG Signals While Listening to Classical Music”, Proceedings of *Conference on Electrical and Electronic Technology, World Engineering Congress 2010* (WEC 2010), 2nd – 5th Aug 2010, Kuching, Sarawak, Malaysia, pp. 430-435.
- 19) A.Saidatul, N.F Mohammad, Zulkarnay Z., **Azian Azamimi**, Iqbal O, Fadzly R., “The Syllabus Enhancement For Anatomy And Physiology In Biomedical Electronics Engineering At University Malaysia Perlis”, Proceedings of *Conference on Engineering and Technology Education, World Engineering Congress 2010* (WEC 2010), 2nd – 5th Aug 2010, Kuching, Sarawak, Malaysia, pp. 26-29.
- 20) Zulkarnay Zakaria, Mohd Hafiz Fazalul Rahiman, Saidatul Ardeenawatie Awang, Nur Farahiyah Mohammad, **Azian Azamimi Abdullah** and Ruzairi Abdul Rahim “Computed Tomography Virtual Lab Software Application in Biomedical Electronic Engineering Programme at University Malaysia Perlis”, Proceedings of *5th International Conference on X-Rays and Related Techniques in Research and Industries 2010* (ICXRI 2010), Langkawi, Malaysia, pp. 247–250.

- 21) H. N. A. Salwa, K. Sundaraj, **A. A. Azamimi** & M. M. D. Zulkali, "Ultrasonic Transducer Kit for Bacteria Growth Monitoring System", Proceedings of *6th International Colloquium on Signal Processing and Its Applications* (CSPA 2010), 21st – 23th May 2010, Melaka, Malaysia. DOI: 10.1109/CSPA.2010.5545264 (Indexed in Scopus & IEEE Xplore)
- 22) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "Effect of Chaos Noise on the Learning Ability of Back Propagation Algorithm in Feed Forward Neural Network", Proceedings of *6th International Colloquium on Signal Processing and Its Applications* (CSPA 2010), 21st – 23th May 2010, Melaka, Malaysia. DOI:10.1109/CSPA.2010.5545250 (Indexed in Scopus & IEEE Xplore)

2009

- 23) **Azian Azamimi** and Yoshifumi Nishio, "On the Chaotic Nature of Biological Signals Using Nonlinear Data Analysis Methodology", Proceedings of *International Conference on Man-Machine Systems (ICoMMS 2009)*, 11th – 13th Oct 2009, Penang, Malaysia, pp. IC5-1 - IC5-4.
- 24) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "An Improvement in Pattern Recognition Problem Using Chaotic BP Learning Algorithm", Proceedings of *RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'09)*, 1st – 3rd Mar 2009, Hawaii, USA, pp. 213-216.

2008

- 25) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "Chaotic BP Algorithm for Sine Wave Function Learning with Different Frequencies", Proceedings of *IEEE Workshop on Nonlinear Circuit Networks (NCN'08)*, 5th – 6th Dec 2008, Tokushima, Japan, pp. 15-18.
- 26) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "An Analysis of Chaotic Noise Injected to Backpropagation Algorithm in Feedforward Neural Network", Proceedings of *International Workshop on Vision, Communications and Circuits (IWVCC'08)*, 1st – 3rd Nov 2008, Xian, China, pp. 70-73.
- 27) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "Chaotic Backpropagation Learning Algorithm in Feedforward Neural Network", Proceedings of *Shikoku-section Joint Conference of the Institutes of Electrical and Related Engineers 2008 (SJCIEE'08)*, Sept 2008, Tokushima, Japan, no. 17-14.
- 28) **Azian Azamimi**, Yoko Uwate and Yoshifumi Nishio, "Good Learning Performance of Backpropagation Algorithm with Chaotic Noise Features", Proceedings of *IEEE CASS Shikoku and Shanghai Chapters Joint Workshop on Nonlinear Circuits and Systems (SSJW'08)*, 4th – 5th Aug 2008, Kagawa, Japan, pp. 36-38.

2007

- 29) **Azian Azamimi** and Yoshifumi Nishio, “Linear and Nonlinear Analysis Methods for Bio-Signal”, Proceedings of *Shikoku-section Joint Conference of the Institutes of Electrical and Related Engineers 2007* (SJCIEE’07), Sept 2007, Tokushima, Japan, no. 17-69.

2005

- 30) **Azian Azamimi**, Taisuke Nishio, Shintaro Arai and Yoshifumi Nishio, “Image Processing of Recurrence Plot Using CNN”, Proceedings of *Shikoku-section Joint Conference of the Institutes of Electrical and Related Engineers 2005* (SJCIEE’05), Sept 2005, Kagawa, Japan, no. 17-17

SUPERVISION

Final Year Project (2010/11) – Graduated

- 1) Rosniza Zakaria
“*Fuzzy Expert System Design for Diagnosis of Hypertension*”
- 2) Syamimi Mardhiah Shahrarum
“*Lung Cancer Cell Classification Method using Neural Network*”
- 3) Nurafifah Md Podsi
“*Pneumonia Symptoms Detection Method using Cellular Neural Network (CNN)*”
- 4) Nur Syazwana Khairudin
“*Development of Wireless Pulse Rate Measurement System Using Programmable System On Chip (PSoC) Application*”
- 5) Intan Farlina Zainatulaili Mohd Idris
“*Classification of EEG Signal Response to Different Melodies using Artificial Neural Network*”
- 6) Nur Aqilah Abd Ghani
“*Classification of EEG Signal Response to Different Melodies using Fuzzy Logic System*”
- 7) Nurul Husna Bt Abdul Razak
“*Classification of EEG Signal Response to Different Melodies using Adaptive Neuro-Fuzzy Inference System (ANFIS)*”
- 8) Adira Ibrahim
“*Development of EEG Signal Based Epileptic Detection using Artificial Neural Network*”

Final Year Project (2009/10) - Graduated

- 1) Hasdiana Mohamaddiah
“Lung Cancer Symptoms Detection Method using Cellular Neural Network (CNN)”
- 2) Hafiz Salami Hussein
“The Effect of Temporal EEG Signals While Listening to Classical Music”
- 3) Zainab Omar
“The Effect of Temporal EEG Signals While Listening to Quran Recitation”
- 4) Su Natasha Mohamad
“A Study of EEG Signal during Watching Foreign and Local Movies”
- 5) Nurul Ain Mohd Johar
“A Study on the Effect of Motivational Talk to the Human Brain Based on EEG Analysis”

Master of Science by Research (Graduated)**Co-Supervisor**

- 1) Aimi Salihah Ahmad Nasir
“Design of a Screening System for Leukemia Based on Blood Samples”
- 2) Elsie Usun Francis
“Design of an Automated Screening System for Leukemia Based on Bone Marrow Samples”
- 3) Norhayati Mohd Nazid
“Satellite Attitude Control System Design Based on Adaptive Neuro-Controller”
- 4) Aini Salwa Hasan Nudin
“Design and Development of Bacteria Growth Monitoring System using Ultrasound Sensors”